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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,226	02/03/2004	Ronald C. Tate	1505-0169	2204

7590

09/20/2005

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EXAMINER

MAI, ANH T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,226

Applicant(s)

TATE ET AL.

Examiner

Anh T. Mai

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/3/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolam [US 6008711] in view of Shan et al. [US 2002/0101167A1].

Bolam discloses current transformer assembly 22 comprising a current transformer 80 having a core 83, first coil 81 in flux inducing relationship with the core, the core including an opening defining a void 98 configured to receive at least second coil 30 via coil blade 112b and an insulation wall member 82 [figures 4-5; col 7, line 42 to column 8, line 5]. Bolam discloses the invention as claimed as cited above except for the insulation cup comprising two parts; the first part configured to couple to second part and both substantially encapsulates the CT. Shan discloses a housing of two part 215, 220 of magnetic core 200; the lower part 220 has an inner support annulus 225 that mates with the upper part 215, interior portion defined a complete periphery of the rounded void [figures 1, 3-4]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use two-part housing as taught by Shan to Bolam. The motivation would have been to isolate the transformer from other electrical parts of the assembly. Therefore, it would have been obvious to combine Shan with Bolam.

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With respect to claim 4, the overlapping section is the area where two parts mating as seen in figure 3.

With respect to claims 5-6, the “complimentary snap-fit features” would have been known by those of ordinary skill in the art as admitted by applicant in disclosure, page 20, lines 9-12]. Therefore, it would have been obvious for Bolam in view of Shan to use the snap-fit features for the core housing.

With respect to claim 8, the claim is method counterpart of structure claim 1.

With respect to claim 9-10, the claim is method counterpart of structure claim 4.

With respect to claim 11, the claim is method counterpart of structure claim 5.

3. Claims 7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolam in view of Shan et al. as applied to claim 1 above, and further in view of Carroll et al. [6097607].

Bolam in view of Shan disclose the claimed invention except for first part included first flexible tab having first aperture and second part includes first detent received by first aperture. Carroll discloses a casing connector comprises combination of recesses formed on the upper casing and plurality of detents on lower casing that reciprocate with the recesses of the casing to define a snap-fit connection and frictional engagement connection [claim 7]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have features as taught by Carroll to Bolam in view of Shan. The motivation would have been to define a snap-fit connection and frictional engagement connection of two casings. Therefore, it would have been obvious to combine Carroll with Bolam in view of Shan.

With respect to claim 12, the claim is method counterpart of structure claim 7.

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4. Claims 13-16, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhart, Jr. [US 3652936] in view of Becker et al. [US 4121147].

Burkhart discloses a current transformer 28 having a core 57, a first coil 58 in a flux inducting relationship with the core, the core including an opening defining a void; a first current coil 26 and a second current coil 27 passing thru the void [figure 7; col 4, lines 26-37].

Burkhart discloses the invention as claimed as cited above except for an insulation member disposed between first and second currents. Becker discloses meter socket 10 including a pair of spaced insulating blocks 18, 20 secured to the bottom wall of the socket base 13 by member 19a for receiving transformer 28 [column 4; lines 50-62]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have an insulation blocks as taught by Becker to Burkhart. The motivation would have been to insulate the coil components. Therefore, it would have been obvious to combine Becker with Burkhart.

With respect to claim 14, it would have been obvious to one of ordinary skill in the art to recognize the size of the insulation part is larger than the coil for purpose of maximize the insulation.

With respect to claim 15, Burkhart's transformer is supported by meter housing 13 [figure 1].

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhart, Jr. in view of Becker et al. as applied in claim 13 and further in view of Bolam.

Burkhart in view of Becker discloses the invention as claimed as cited above except for the material of winding coil being copper. Bolam discloses meter's transformer with two identical coils 30, 32 elongated and multiply bent piece of copper [figure 2, column 5, lines 33-37]. At the time of the invention, it would have been obvious to a person of ordinary skill in the

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art to copper for conductive winding as taught by Bolam to Burkhart in view of Becker. The motivation would have been to utilize the material with desired conductivity. Therefore, it would have been obvious to combine Bolam with Burkhart in view of Becker.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhart in view of Becker as applied in claim 13 and further in view of Shan.

Burkhart in view of Becker discloses the claimed invention except for an insulation cup comprising two parts; the first part configured to couple to second part and both substantially encapsulates the CT.

Shan discloses a housing of two part 215, 220 of magnetic core 200; the lower part 220 has an inner support annulus 225 that mates with the upper part 215, interior portion defined a complete periphery of the rounded void [figures 1, 3-4]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use two-part housing as taught by Shan to Burkhart in view of Becker. The motivation would have been to isolate the transformer from other electrical parts of the assembly. Therefore, it would have been obvious to combine Shan with Burkhart in view of Becker.

#### *Double Patenting*

7. Claim 13 of this application conflict with claim 3 of Application No. 10/772,160 because the current claims are either an obvious broadening of the scope of, or an obvious variant of the present claims. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all

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but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

*Conclusion*

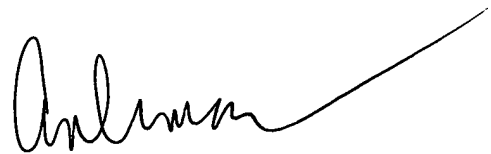
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ANH MAI  
PRIMARY EXAMINER**